Understanding Diagrams and Graphs

Don’t skip over diagrams and graphs when reading!
These visual aids provide summaries or can illustrate a complex process; understanding how to read them is a very efficient way to learn material.

When tackling diagrams or graphs, pay attention to:

Captions: What clues about the illustration can you gain from the general description?
Labels: Can you define or describe the items labeled? If not, reread the text.
Directionality: Are there arrows, numbers or letters that orient the illustration?
The Big Picture: Do you notice any trends in data? Can you draw conclusions about relationships among items on a diagram?

Review the two examples provided. By answering the questions for each, you’ll see how much information can be gleaned from diagrams and graphs.

1.

![Diagram of Earth's Radiation Budget](image)

What information does this diagram provide? How do the arrows help illustrate the process depicted in the diagram? How do the colors of the arrows and the text help organize the facts?

Diagram taken from [Calypso Outreach](http://calypso-outreach.org)
Studying with Diagrams and Graphs:

Start assigned readings by first reviewing any visual aids provided. This will lay the foundation for understanding the meat of your reading.

Review them again right before class. This will help prepare you for lecture.

After you have completed a reading assignment, create a visual representation that demonstrates your understanding. This active learning strategy is an effective way to transfer your new learning to your long-term memory.

What information does this graph provide? Note the labels in the X and Y Axis, as well as the location of the “Profit Target” line. What does this graph tell you about the performance of the three products over the course of a year?

Graph taken from JPowered’s History of Bar Charts and Graphs